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SMALL TEAMS, LARGE EFFECTS: SPECIAL OPERATIONS FORCES AND THE
EMPLOYMENT OF OPERATIONAL FIRES

by

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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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23 October 2009

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Abstract

Small Teams, Large Effects: Special Operations Forces and the Employment of Operational Fires

The planning and synchronization of joint operational fires with other operational functions is critical to mission success. Operational fires are normally the task of conventional forces, but historical analysis indicates that special operations forces (SOF) have conducted operational fires with great success. In these instances, there were several overarching conditions that drove the Joint Force Commander (JFC) to choose a SOF option to conduct these fires. Historically, these conditions were limited conventional force capability and political restrictions. SOF overcame these limitations through the combination of effective phasing on limited specific objectives, unique SOF capabilities, and synergy with conventional forces.

This paper uses historical examples to illustrate why military commanders made the decision to employ SOF instead of conventional forces and how the decision played in the larger context of operational art. It evaluates the military and political frictions that the commanders faced and how the unique capabilities inherent in SOF overcame these frictions.

INTRODUCTION

Military history shows us that conventional forces have normally been responsible for executing operational fires. However, conventional forces cannot always accomplish effective fires due to lack of capability or political limitations. In these situations, can the commander who possesses special operations forces (SOF) leverage the unique capabilities inherent in SOF to achieve the desired effect?

The thesis of this paper contends that today's Joint Force Commander (JFC) may benefit from the employment of SOF to conduct operational fires in situations when conventional forces are incapable or the political costs are too high. Evidence indicates that SOF operations succeed when targeted against a specific limited objective. When linked to a limited objective, the ability to employ clandestine maneuver enables SOF to penetrate enemy defenses and exploit vulnerabilities. Using clandestine maneuver, SOF achieve the element of surprise and gain relative superiority over larger, more powerful forces.¹ Enabled by the element of surprise, a small but lethal unit can achieve economy of force and accomplish the mission objective.²

If this thesis is correct, its significance is the JFC's expansion of choice in the employment of operational fires.³ Research will answer the following questions:

1. What targets sets are best allocated to SOF?
2. What circumstances dictate the use of SOF?
3. In what phase of combat operations is SOF best employed?
4. Can SOF forces accomplish operational fires alone, or is synergy achieved in coordination with conventional force capabilities?

Since the topics of SOF and operational fires are very broad, the research methodology of this paper is limited to SOF direct action missions with lethal kinetic effects in high intensity conflict. Analysis is focused on British SOF operations to sink the *Tirpitz*, German SOF

operations to subdue the Belgian fortress at Eben Emael, Operation JEDBURGH in support of Operation OVERLORD, the use of British SOF in the Falkland Islands War, and the use of SEAL teams in Operation DESERT STORM.

BACKGROUND

In order to effectively analyze historical special operations and their utility in operational fires, it is necessary to define these concepts in terms of current operational doctrine. “Fires are defined as the use of weapons systems to create a specific lethal or nonlethal effect on a target.”⁴ Joint doctrine states that fires are used to interdict enemy capabilities.⁵

Specifically, “interdiction diverts, disrupts, delays, or destroys the enemy’s military surface capability before it can be used effectively against friendly forces, or to otherwise achieve objectives.”⁶

Within operational art, “the JFC determines the enemy’s center(s) of gravity (COGs) and decisive points and how the application of fires can assist in creating the desired effect to obtain the objective.”⁷ Fires can be used both to support the maneuver of forces and to create specific effects that are independent of maneuver.⁸ Operational fires differ from tactical fires in that operational fires are planned at the operational level to achieve a specific effect intended to have a decisive impact on the outcome of a campaign or major operation.⁹

In *Joint Operational Warfare, Theory and Practice*, Dr. Milan N. Vego identifies the following purposes to plan and conduct operational fires:

- Isolate or shape the battlefield/battlespace.
- Facilitate operational maneuver of friendly ground forces.
- Prevent the enemy’s operational maneuver.
- Interdict the enemy’s uncommitted forces.
- Destroy or neutralize the enemy’s critical functions and facilities.
- Disrupt or cut off the enemy’s logistical support and sustainment.
- Deceive the enemy as to the place and time of a campaign or major operation.
- Diminish the enemy’s morale.

- Protect one's area of operations.
- Protect the development of new bases (in a maritime theater).
- Prevent the enemy's retreat or withdrawal¹⁰

Joint Publication 3-05.1, *Joint Special Operations Task Force Operations*, defines special operations forces as: "Small, specially organized units manned by people carefully selected and trained to operate under physically demanding and psychologically stressful conditions to accomplish missions using modified equipment and unconventional applications of tactics against strategic and operational objectives."¹¹ Special operations are viable alternatives to conventional operations in hostile, denied, or politically sensitive environments, and the principles of war (objective, offensive, mass, economy of force, maneuver, unity of command, security, surprise, and simplicity) are applicable.¹²

Phasing is a key element of operational design. Joint Publication 5-0, *Joint Operational Planning*, defines a five-phase model for executing an operation or campaign. Phase II, Seize Initiative, is defined as: "Executing offensive operations at the earliest possible time, forcing the adversary to offensive culmination and setting the conditions for decisive operations."¹³

DISCUSSION / ANALYSIS

SOF Operations to Eliminate the *Tirpitz*

The British SOF operations to eliminate the German battleship *Tirpitz* were a central focus in the greater strategy of the Battle of the Atlantic in World War II. German naval forces had wreaked havoc on Allied merchant shipping and threatened to cut off British sea lines of communication. While the German submarine force was responsible for the bulk of Allied merchant shipping losses, the *Tirpitz* remained a significant threat that captured the attention of Allied planners.¹⁴ The mere presence of the *Tirpitz* in the North Atlantic forced

England to divert naval assets to guard against a possible sortie targeted at Allied shipping. Winston Churchill wrote, “The whole strategy of the war turns at this period to this ship which is holding four times the number of British capital ships paralyzed, to say nothing of the American battleships retained in the Atlantic.”¹⁵

The SOF attacks on the *Tirpitz* and her homeport facilities at Saint-Nazaire, France, were operational fires because they were planned on the operational level to interdict the offensive sea power of the *Tirpitz* through both the actual destruction of the *Tirpitz*, and the destruction of the key facilities critical to her logistical support and sustainment. As an operational fire, the interdiction of the *Tirpitz* was planned to prevent strikes on Allied supply convoys in the North Atlantic.

The first attack, Operation CHARIOT, on the night of 27 March 1942, targeted the port facility of Saint-Nazaire, France. The second attack, Operation SOURCE, on 22 September 1943, targeted the *Tirpitz* in her anchorage in Trondheim Fiord, Norway.

Operation CHARIOT, 27 March 1942

Operation CHARIOT was developed to destroy the port and dry dock facilities at Saint-Nazaire. This was an operational fire because it was planned to prevent the maneuver of the *Tirpitz* from her anchorage in Trondheim Fiord, Norway. Saint-Nazaire was the *Tirpitz*'s homeport and its Normandie dry dock was the only facility capable of repairing a vessel the size of the *Tirpitz*.¹⁶ Thus, the attack on Saint-Nazaire was operationally significant because if the Normandie dry dock were destroyed, the Germans would be reluctant to sortie the *Tirpitz* without adequate port facilities to repair any sustained battle damage.¹⁷

The caissons that sealed the Normandie dry dock were 167 feet long, 54 feet high, and 35 feet thick.¹⁸ In World War Two, the accuracy of conventional bombing was inadequate to

effectively target a port facility.¹⁹ The hardness of the target and the limited accuracy of conventional bombing meant that only a SOF operation could accomplish the objective of destroying the Normandie dock.

The operational plan called for a covert seaborne insertion of SOF into Saint-Nazaire to destroy the Normandie dock and surrounding infrastructure. The main thrust of the attack was a deliberate ramming of the HMS *Campbeltown* into the caissons of the Normandie dock. The plan depended on deception and surprise for success. To achieve the element of surprise, the HMS *Campbeltown*'s exterior was modified to look like a German destroyer so it could pass through German defenses unnoticed.²⁰ It was also specially fitted with 5 tons of explosives designed to demolish the Normandie dock.²¹

The SOF aboard HMS *Campbeltown* used the cover of darkness and deception to gain access to Saint-Nazaire and rammed the Normandie dock. Once ashore, the SOF proceeded to attack critical port facilities. The HMS *Campbeltown* was lodged onto the southern caisson and its explosives detonated the following morning. The resulting explosion destroyed the southern caisson and rendered the dry dock unusable.²²

Operation SOURCE, 22 September 1943

The SOF attack on the *Tirpitz*, on 22 September 1943, was a direct attack intended to sink the *Tirpitz* at her anchorage at Trondheim Fiord, Norway. Operation CHARIOT was effective in deterring the German command from moving the *Tirpitz* from its anchorage by denying the *Tirpitz* her repair facilities, but a knock-out blow had to be delivered if the *Tirpitz* was going to be eliminated as a potential threat to Allied sea lines of communication.

The decision to use SOF instead of conventional forces was based on limited conventional force capabilities. The *Tirpitz* was largely protected from aerial bombing due to heavy anti-

aircraft defenses and the steep cliffs within several hundred yards on either side of the Trondheim Fiord anchorage.²³ The geography of Trondheim Fiord also offered protection from surface attack and conventional sub-surface attack due to the confined area of the fiord.²⁴

To overcome the inability of conventional forces to effectively reach and sink the *Tirpitz*, the British developed Operation SOURCE. This operation employed SOF in midget submarines, designated X-craft, to gain access to the *Tirpitz* while at her anchorage. The X-craft were equipped with two releasable side charges each composed of two tons of amatol high explosive.²⁵ Four of six X-craft were successfully towed to an insertion point by conventional submarines where the X-craft were detached for insertion into Trondheim Fiord.²⁶ X-6 and X-7 successfully navigated the fiord, defeated the anti-submarine nets, and deployed their charges under the *Tirpitz*.²⁷ The subsequent explosions did not sink the *Tirpitz* as planned, but caused considerable damage. Propeller shafts were distorted so that they could not turn, the port rudder was rendered inoperable, and all four 15-inch gun turrets were jarred off their tracks.²⁸ As a result the SOF action, the *Tirpitz* never went to sea again.²⁹

The Assault of Fort Eben Emael, 10 May 1940

The German SOF attack on the Belgian Fort at Eben Emael, on 10 May 1940, is an outstanding example of how SOF forces were able to conduct fires when conventional forces were incapable. The attack on Eben Emael was an operational fire because it was planned at the operational level to support the movement of the northern arm of the German attack into France. The German northern line of operation was planned as a deception maneuver through Belgium to northern France.³⁰ This deception maneuver was intended to exploit

French and British preconceptions that the Germans would attack northern France through Belgium in a plan similar to the Schleiffen Plan of 1914.³¹ The desired effect of the deception was to draw the French and British forces to the north to engage the German thrust through Belgium, while the main thrust of the German offensive would penetrate through the Ardennes and outflank the Allies to the south.³²

In *SPEC OPS, Case Studies in Special Operations Warfare: Theory and Practice*, William H. McCraven details the operational significance of Eben Emael. The success of the deception hinged on the timely ability of the German forces in Belgium to cross the Albert Canal before the Belgian forces were able to destroy the three bridges at Veldwezelt, Vroenhoven, and Cannes. Covering the bridges from high terrain were the guns of Fort Eben Emael. Eben Emael was densely armored and bristled with numerous gun emplacements capable of destroying the vital bridges needed to cross Albert Canal. Due to its thick armament and withering firepower, Eben Emael was virtually impregnable to attack from conventional ground or air forces. It was an operational imperative that the guns at Eben Emael be silenced at the very outset of the German invasion to ensure the three bridges could be captured intact.³³

Conventional forces were incapable of accomplishing the mission quickly enough to ensure the preservation of the bridges. Instead, the Germans developed a plan using gliders to land assault engineers on top of the fortress at the very outset of the invasion. The DFS 230 glider was capable of carrying ten combat-loaded troops and was modified with a hand brake that was deployed on landing to significantly shorten the landing rollout.³⁴

The Germans at Eben Emael were specially trained in the use of shaped charge explosives. These charges consisted of 50 and 12.5-kilogram variants that were specifically designed to

penetrate the defensive casemates and cupolas.³⁵ Using the gliders to achieve the element of surprise, a SOF team of 69 men was able to subdue a defensive force ten times their size and neutralize the gun emplacements in only 20 minutes. Following the initial success of the assault, the SOF team set up defensive positions and used Stuka aircraft as close air support to defeat numerous Belgian counter-attacks until relieved by conventional forces.³⁶ “The tactical raid on Eben Emael not only took the Allies by surprise, but also generated an operational effect by distracting their attention from the real German Schwerpunkt (weight of effort) in the Ardennes.”³⁷ This action was critical in the German scheme of maneuver and was a “psychological blow that precipitated Belgian collapse.”³⁸

Operation JEDBURGH, France 1944

The success of Operation OVERLORD depended on the ability of the Allies to break out of their amphibious lodgment before the Germans could reinforce with their reserves. In fact, Allied planners were more concerned about driving off German reserves than they were about the initial amphibious landing.³⁹ The operational challenge for General Eisenhower was to deny the Germans the ability to maneuver their reserves against the Normandy invasion.

In his book, *Operation Jedburgh: D-day and America's First Shadow War*, Colin Beavan describes the Allied planning to interdict German reserves. The Allied plan called for three measures to prevent the Germans from reinforcing at Normandy. First, Operation ANVIL would divert German forces to the south. Second, Operation FORTITUDE, a deception plan, would paralyze German defenses by convincing Hitler that the impending Allied invasion would land at Pas-de-Calais instead of Normandy. Third, and most importantly, General Eisenhower developed the Transportation Plan. This called for the operational fires of

conventional bombers and SOF to interdict German reserves by destroying roads, railways, and bridges in an effort to isolate Normandy from German reinforcement. Operation JEDBURGH was born out of the Transportation Plan.⁴⁰

Operation JEDBURGH called for three-man special operation teams to be inserted behind enemy lines and link up with French Resistance fighters to train and coordinate fires. The Jedburgh teams linked operational objectives to the sabotage attacks of the Resistance. The plans “identified crucial railway targets, important points for roadblocks, and key telecommunication line cuts that would most hurt German movement.”⁴¹ Technological advancements, such as the development of plastic explosives in Britain, greatly assisted in these sabotage efforts.⁴²

One week after the D-day invasion, the Resistance led by Jedburgh teams, had dealt a paralyzing blow to German mobility. They were responsible for 950 cuts in French rail lines including those around Toulouse that prevented the rail movement of the 2nd SS Panzer Division.⁴³ The combination of Allied bomber attacks and Jedburgh led sabotage created mobility gridlock where “hardly a train could move in France.”⁴⁴

British SOF Operations in the Falklands War, 1982

British SOF operations were a vital component in the successful recapture of the Falkland Islands in the Falklands War in 1982. The largest threat to the British invasion force was the threat of Argentinean air strikes. These threats were located both on the Falkland Islands and on the Argentine mainland. Two SOF raids, one executed and one planned but never executed, illustrate the utility of SOF in conducting operational fires.

The Pebble Island Raid, 13-14 May 1982

The nearest Argentine air capability consisted of ground-attack Pucara aircraft located on Pebble Island. These aircraft posed a potential threat to British shipping attempting to enter the northern entrance to Falkland Sound.⁴⁵ The British executed an operational fire on the aircraft at Pebble Island using the Special Air Service (SAS). The SAS was best suited for the operation because they were the most capable of conducting clandestine pre-raid reconnaissance, achieving the element of surprise at Pebble Island, and ensuring destruction of the aircraft on the ramp.

Lawrence Freedman in his book, *The Official History of the Falklands Campaign, Volume II: War and Diplomacy*, describes in detail the Pebble Island raid. The raid began with the clandestine insertion of a SAS reconnaissance patrol by Klepper canoes on Pebble Island on 13 May 1982. On 14 May 1982, a 45-man SAS team landed via helicopter on the south coast of Pebble Island and made their way to the airfield under the cover of darkness. When they reached the airfield, the HMS *Glamorgan* fired illumination rounds while the SAS team destroyed all six Pucara aircraft, five additional aircraft, as well as the ammunition and fuel supplies. The SAS team then maneuvered under the cover of naval gunfire back to the helicopters at the landing zone. “This was a remarkably successful raid, depriving the garrison of a number of aircraft and undermining morale, by demonstrating the capacity of special forces to mount operations on the Islands against units that were detached from the main forces.”⁴⁶

Operation MIKADO, 17 May 1982

Exocet armed aircraft at the Rio Grande airfield in Argentina were perhaps the most significant threat to British forces. An operational fire to eliminate this threat was required to

protect the British amphibious invasion force from air attack. There was, however, great political reluctance amongst the British leadership to conduct conventional attacks on the Argentine mainland. The political costs among other nations of Latin America, the United Nations, and the United States were too great to risk a conventional attack on the mainland.⁴⁷ Logistically, Britain lacked sufficient resources to support a Vulcan bomber strike from the Ascension Islands. “From Ascension more than 20 Victor tankers (that is one more than actually available) would be needed to support a single Vulcan flight with 21 x 1,000-lb bombs.”⁴⁸ The political frictions of attacking the Argentine mainland and the lack of conventional capability meant the operational fire fell to the British SAS forces to accomplish.

David Reynolds described the specifics of Operation MIKADO in his book, *TASK FORCE: The Illustrated History of the Falklands War*. The British planned to fly 55 SAS men via C-130 Hercules aircraft to Rio Grande. Once on the ground, the SAS would destroy the Super Etentard aircraft and the Exocet missiles, and kill or capture the pilots. The SAS would then exfiltrate via the C-130 or by foot to Chile. In order to obtain the necessary reconnaissance for the operation, an 8-man SAS team attempted infiltration of Rio Grande by helicopter. Bad weather forced the helicopter down on the Chilean coast and compromised the mission. The C-130 option was scrubbed in favor of a submarine insertion, but was not implemented prior to the cessation of hostilities.⁴⁹

As the war in the Falklands proceeded, the failure to conduct an operational fire on the Argentine land based air assets nearly cost the British the war. Throughout the war, Argentine air attacks sunk the HMS *Sheffield*, HMS *Coventry*, HMS *Ardent*, HMS *Antelope*, RFA *Sir Galahad*, MV *Atlantic Conveyor*, and damaged over a dozen more vessels.⁵⁰

Although the raid on Rio Grande never took place, the planned operational fire by SOF may have prevented the loss of British naval assets due to air attack.

SEALs in Operation DESERT STORM, 23 February 1991

In operation DESERT STORM, Navy SEALs conducted operational fires to reinforce a coalition plan of deception. The coalition had developed an elaborate deception plan to convince the Iraqi forces that an amphibious assault would be conducted in Kuwait.⁵¹ In conjunction with a psychological operation that consisted of leaflets warning of an impending amphibious assault, the SEALs conducted operational fires the night prior to the commencement of ground operations to reinforce the deception.

Susan L. Marquis describes the operation in her book, *Unconventional Warfare: Rebuilding U.S. Special Operations Forces*. A SEAL platoon of 15 men landed on the Kuwaiti coast and placed six, twenty-pound C-4 explosive charges on the beaches. The charges were detonated three hours prior to the commencement of the ground operation. After the explosions, the SEALs opened fire on the beaches and detonated charges offshore for 15 minutes. Conventional airstrikes also added to the deception. “The Iraqis were fooled by this deception to such an extent that all of the Iraqi forces in place to defend against invasion from the sea remained fixed in place throughout the first day of the offensive. As a result, the Iraqis were unprepared to meet the coalition’s “lefhook” as coalition forces swung around Iraqi troops concentrated in Kuwait and enveloped them.”⁵²

CONCLUSIONS

As the analysis indicates, SOF are capable of conducting operational fires against targets with a limited specific objective. The use of SOF provided the JFC expansion of choice and economy of force. The historical conditions that led to a SOF option were limited

conventional force capabilities and political restrictions. SOF overcame these limitations through the combination of effective phasing on limited specific objectives, unique SOF capabilities, and synergy with conventional forces.

The counter-argument to this conclusion is that the SOF operations were tactical fires vice operational. While not all of the cases analyzed fit the classic mold of an operational fire, each case was specifically linked to doctrine as defined in the Joint Publications and the purposes of operational fires as identified by Dr. Milan Vego. Since all of the fires analyzed were planned on the operational level, met the intent of joint doctrine for operational fires, and achieved operational effects, this counter-argument is discounted.

Limited Conventional Force Capability

In the cases studied, the limits of conventional force capabilities led the JFC to select a SOF option. In Operation CHARIOT, the strength of the Normandie dock caissons and lack of conventional airpower accuracy facilitated the need for a SOF assault. In Operation SOURCE, the air defenses and physical geography of the Norwegian fiord prevented an attack on the *Tirpitz* by conventional air, surface, or sub-surface forces. At Eben Emael, no other German force could have seized and neutralized the fortress guns prior to the Belgians destroying the vital bridges across the Albert Canal. In isolating the beaches of Normandy from German reinforcement, only the combination of Jedburgh team sabotage and conventional airpower created the desired effect. In the Falklands, limited air capability prevented conventional operational fires on Pebble Island and Rio Grande. Lastly, in Operation DESERT STORM conventional forces lacked the capability to clandestinely insert on the Kuwaiti beaches to plant the demolition charges.

Political Restrictions

Colin Gray correctly identifies that, “SOF prosper when conventional operations are prohibited by political factors.”⁵³ This conclusion is validated in the British aborted Operation MIKADO in the Falklands War. Even if the British had overcome their operational reach limitations of effectively targeting Rio Grande, the political ramifications exceeded the value of conducting conventional bombing attacks. A SOF option was deemed politically acceptable because SOF could limit their attack to the aircraft on the ramp and minimize collateral damage. On the contrary, high altitude conventional bombing risked not only inflicting large amounts of collateral damage, but also risked the potential loss of British prestige and legitimacy in the international community.

Effective Phasing of SOF Operations on Limited Specific Objectives

Analysis indicates that the success of SOF operational fires depended on determining target sets with a limited specific objective, and effectively phasing operations to seize the initiative. Because the raids were focused on limited specific objectives, SOF were able to leverage their unique capabilities and achieve relative superiority. Relative superiority enabled economy of force and presented the JFC an overall reduction of risk to forces and a higher probability of mission success. By effectively incorporating SOF fires into Phase II of operations, the initiative was seized for follow-on conventional force actions.

Unique SOF Capabilities

The SOF capability common in all the historical cases analyzed is clandestine maneuver to achieve the element of surprise. “Surprise is critical for tactical success, and surprise effect is vital for strategic utility.”⁵⁴ The element of surprise enables SOF to mass sufficient

firepower on decisive points and achieve relative superiority. The commanders correctly recognized the potential of SOF to maneuver clandestinely within and behind enemy lines to exploit enemy vulnerabilities.

Advanced and unconventional technologies are fundamental to SOF capability. SOF often rely heavily on these technologies in their operational and strategic utility.⁵⁵ In Operation CHARIOT, the modifications of the HMS *Campbeltown* were technological advances designed to destroy hardened targets. Arguably rudimentary advances, the modifications of the HMS *Campbeltown* enabled the element of surprise and concentrated the explosive power needed to destroy the Normandie dock caissons. In Operation SOURCE, advanced submersible technology enabled the clandestine access to the Trondheim Fiord to place explosive charges under the *Tirpitz*. At Eben Emael, the Germans combined advanced glider technology to achieve surprise and advanced shaped charge technology to quickly subdue the Belgian defenses. In the Falklands, the British used Klepper canoes to infiltrate Pebble Island to conduct pre-raid reconnaissance. Likewise, the SEALs used Zodiac rubber boats to clandestinely approach the Kuwaiti beaches to plant C-4 explosives.

Synergy with Conventional Forces

In the cases analyzed, SOF achieved synergistic effects through the synchronization and coordination with conventional forces. All of these operations relied in some manner on conventional force capability. Operation CHARIOT relied on the modification of a conventional surface vessel to achieve the destructive effect on the Normandie caisson. Operation SOURCE relied on conventional submarines to tow the X-craft midget submarines to the point of insertion in the Trondheim Fiord. The assault on Eben Emael required

conventional aircraft to tow the gliders to the target, and Stukas for close air support to maintain control of the fortress until conventional forces could relieve the glidermen. The Jedburgh teams achieved synergy with the conventional bombing efforts of the Transportation Plan. The SAS in the Falklands relied on conventional airpower for transportation to the enemy airfields and for illumination of the target area. Lastly, the SEALs in Operation DESERT STORM combined their clandestine efforts on the beaches with conventional airstrikes to convince the Iraqis that an amphibious landing was occurring in Kuwait. Joint doctrine states that, “SOF are most effective when special operations are fully integrated into the overall plan and the execution of special operations is through proper SOF command and control (C2) elements responsive to the needs of the supported commander.”⁵⁶

RECOMMENDATIONS

The JFC should consider the use of SOF when conducting operational fires. SOF operational fires should be planned for limited specific objectives on targets where conventional forces are incapable of achieving the objective or political limitations apply. SOF fires are best integrated in Phase II of operations because of their inherent capability to seize the initiative.

To effectively plan such operations, the JFC needs SOF expertise on his planning staff to better analyze what SOF can and cannot accomplish. “SOF perform most successfully when people who understand special warfare select and plan operations.”⁵⁷ An assessment of the objective, the cost versus benefit, the political implications, and the risk to the forces must be completed before determining a SOF course of action.

SOF must maintain their tactical ability to maneuver clandestinely. This is especially true in direct action missions. The ability for SOF to maneuver clandestinely in areas where conventional forces are denied access is a critical capability that enables SOF to achieve surprise and relative superiority. In the context of the Global War on Terrorism, special operations forces of both the United States and our coalition partners find themselves fully engaged in counterinsurgency warfare. Although vitally important to current conflict, there is the potential for counterinsurgency requirements to supersede the requirement to maintain denied access entry capabilities in both funding and training metrics. The special operations community must be vigilant to maintain all their critical capabilities, even those capabilities not required in the Global War on Terrorism.

SOF must continue to develop and leverage the use of advanced and unconventional technologies. Through the use of advanced and unconventional technologies SOF are able to achieve operational and strategic level effects. Whether technology designed to enhance clandestine maneuver or focus the destructive effect of a weapons system, these types of technologies are a force multiplier in the hands of SOF. Through the use of advanced and unconventional technology, SOF achieves operational and strategic level effects with economy of force.

SOF must continue to train in a joint environment with conventional forces. In order to achieve synergy with minimal friction when conflict arrives, SOF and conventional forces must have had adequate opportunity for joint training. With adequate joint training, SOF and conventional forces can achieve a better understanding of their counterpart's capabilities and limitations, identify interoperability gaps, and develop proficiency in integrating various tactics, techniques and procedures into joint operations.

NOTES

1. William H. McCraven, *SPEC OPS. Case Studies in Special Operations Warfare: Theory and Practice* (New York, NY: The Random House Publishing Group, 1996), 4.
2. Colin S. Gray, *Explorations in Strategy*, (Westport, CT: Praeger Publishers, 1998), 168.
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